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# Hydra-Lectric Crane

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## HYDRA-ELECTRIC CRANE

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### ABSTRACT

The report describes the designing, building and testing of a hydraulically activated electrically remote controlled utility crane. The installation of the crane would be on a one ton truck chassis equipped with a utility or pickup bed. The electrical power supply for the crane comes from the electrical system of the truck's motor. The crane can be controlled up to twelve feet away with two three position toggle switches mounted in a pendant. The hydraulic system incorporates the use of a cylinder, motor and a motor and pump assembly with an attached reservoir. The cylinder has the capability of vertically lifting three thousand pounds at a six foot boom length. The motor supplies horizontal rotational movement of the boom. This motor coupled with a planetary gear reduction unit has the capability of revolving three thousand pounds through a six foot radius.

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